

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

TROY WILSON

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Civil Action

Plaintiff,

vs.

No. 1:19-CV-00146-MJH

TPK, INC.,

Defendant,

vs.

SMG EQUIPMENT LLC

Third-Party Defendant

CLAIM CONSTRUCTION OPINION AND ORDER

Plaintiff, Troy Wilson, alleges that Third-Party Defendant, SMG Equipment, LLC is infringing on his patent, United States Patent No. 10,117,386 (Patent '386). Following review of the Claim Construction Chart, Joint Prehearing Statement, and Appended Evidence (ECF No. 131), the respective briefs (ECF No. 132, 134, 137, and 143), and record from the *Markman* hearing held on August 10, 2023, the Court is now ready to consider the disputed claims and construe the same.

I. Factual Background

Mr. Wilson owns a patent, Patent '386 entitled "Synthetic Turf Removal Skid Steer Attachment Assembly." The patent was filed on June 20, 2013, and issued on November 6, 2018. The Patent's Abstract describes the mechanical device as follows:

A turf removal attachment is bolted to a skid steer to allow hydraulic

motors thereon to first power cutting blades to form easily removable strips of turf and then, on a lower gear ratio, the drum to which roller tines are attached to spool the strips of turf. Hydraulic circuitry is provided to permit the hydraulic fluid of the skid steer to power the turf removal tools on the turf removal attachment.

(ECF No. 57-1 at p. 2). Claim 1 of Patent '386 reads as follows:

A synthetic turf removal attachment capable of being attached to a skid steer, comprising:

- (a) a frame comprising:
 - (i) a vertically oriented transverse component;
 - (ii) a first arm extending substantially orthogonally from a first distal end of the transverse component; and
 - (iii) a second arm extending substantially orthogonally from a second distal end of the transverse component, wherein the first distal end is on the opposite end of the transverse component from the second distal end;
- (b) a first removable turf removal tool connected to a distal end of the first arm;
- (c) a second removable turf removal tool connected to a distal end of the second arm;
- (d) a first hydraulic motor operably coupled to the first turf removal tool;
- (e) a second hydraulic motor operably coupled to the second turf removal tool;
- (f) a hydraulic system comprising:
 - (i) a first hydraulic quick coupler capable of being operably connected to an output port of an external source of hydraulic fluid and operably connected to a valve assembly;
 - (ii) a second hydraulic quick coupler capable of being operably connected to a return port of the external source of hydraulic fluid and operably connected to the valve assembly, wherein the external source of hydraulic fluid capable of being operably connected to by the first and second hydraulic quick couplers is a hydraulic system of the skid steer; and

(iii) the valve assembly operably connected to the first hydraulic motor and the second hydraulic motor; and

(g) a mounting plate attached to a rear face of the transverse component having a plurality of holes capable of accepting a plurality of attachment bolts, permitting attachment of the synthetic turf removal attachment to the skid steer.

(ECF No. 57-1 at p. 8).

The parties now request that this Court construe the following disputed claim terms within the Patent:

1. “Synthetic turf removal attachment” (Claim 1-Preamble)
2. “Capable of being attached to” (Claim 1-Preamble)
3. “Skid steer” (Claim 1-Preamble)
4. “Substantially orthogonally” (Claim 1(a)(ii))
5. “Transverse component” (Claim 1(a)(i))
6. “Transverse element” (Claim 9)
7. “Quick coupler” (Claim 1(f)(i)-(ii))
8. “operably connected” (Claim 1(f)(i)-(ii))
9. “Removable turf removal tool” (Claim 1(b)-(c))
10. “Mounting plate” (Claim 1(g))
11. “[Plurality of] attachment bolts” (Claim 1(g))
12. “Permitting attachment” (Claim 1(g))

II. Relevant Standard

The purpose of the claim construction process is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). When the parties have an actual

dispute regarding the proper scope of claim terms, their dispute must be resolved by the judge, not the jury. *Id.* at 979. The Court only needs to construe a claim term if there is a dispute over its meaning, and it only needs to be construed to the extent necessary to resolve the dispute.

Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999).

“[T]here is no magic formula or catechism for conducting claim construction.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005). But there are guiding principles. *Id.* “The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.” *Id.* at 1313. In some cases, the ordinary meaning of a claim term, as understood by a person of ordinary skill in the art, is readily apparent even to a lay person and requires “little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314. Where the meaning is not readily apparent, however, the court may look to “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.”

Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004). Those sources include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.* “The claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314. For example, “the context in which a term is used in the asserted claim can be highly instructive.” *Id.*

“[C]laims must be read in view of the specification, of which they are a part.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The specification “is always highly relevant to the claim construction analysis.” *Id.* (quoting

Vitronics, 90 F.3d at 1582). The specification may contain a special definition given to a claim term by the patentee, in which case, the patentee’s lexicography governs. *Id.* at 1316. The specification may also reveal an intentional disclaimer or disavowal of claim scope. *Id.* However, “even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal marks omitted). The “preferred embodiment cannot be the only product covered by the claims; if it were, the claims themselves would be unnecessary.” *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 809 (Fed. Cir. 2007). “It is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Id.* at 956.

Courts should also consider the patent’s prosecution history. *Phillips*, 415 F.3d at 1317. It may inform “the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* Statements made by a patentee or patent owner during *inter partes* review may also be considered. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017).

In appropriate cases, courts may also consider extrinsic evidence, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For example, dictionaries, especially technical dictionaries, can be helpful resources during claim construction by providing insight into commonly accepted meanings of a term to those of skill in the art. *Phillips*, 415 F.3d

at 1318. However, if the meaning of a claim is unambiguous from the intrinsic evidence, then a court may not rely on extrinsic evidence for purposes of claim construction.” *Hockerson-Halberstadt, Inc. v. Avia Grp. Int'l, Inc.*, 222 F.3d 951, 955 (Fed. Cir. 2000). Expert testimony can also be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.*; *see also Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331–32 (2015).

III. Discussion

A. Claim 1 Preamble Terms - “Synthetic turf removal attachment”; “Capable of being attached to”; “Skid steer”

The parties first dispute whether the Preamble claim terms are limiting. In full, the Preamble of Claim 1 states: “[a] synthetic turf removal attachment capable of being attached to a skid steer.” Mr. Wilson argues that the words appearing in the preamble are not a limitation. In particular, Mr. Wilson maintains that the Preamble is not limiting because Claim 1 of the ‘386 Patent defines a structurally complete invention and does not recite essential structures or steps. Further, Mr. Wilson asserts that, during the prosecution of the ‘386 Patent, the Examiner noted that the preamble is not considered a limitation and is of no significance to claim construction.

SMG contends that the Preamble is limiting because the claims depend on it for an antecedent basis. In other words, SMG maintains that the Preamble is “grammatically essential” to the understanding of one or more elements in the body of the claim. Further, SMG argues that the Examiner’s conclusion that the preamble is “not limiting” is not binding upon this Court.

In response, Mr. Wilson argues the Preamble does not supply “antecedent basis” for terms in the body defining the invention; nor does it supply structure needed to make the body of the claim itself a “structurally complete invention.” Rather, Mr. Wilson asserts that it merely

provides a name for the structure that the body of the claim defines. Finally, Mr. Wilson maintains that, even if the disputed phrase did provide an antecedent basis for a term defining the invention, that alone is not sufficient to render the Preamble limiting

As a general rule, preamble language is not treated as limiting language. *Arctic Cat Inc. v. GEP Power Prod., Inc.*, 919 F.3d 1320, 1327 (Fed. Cir. 2019). The Federal Circuit has long ruled that “a preamble is not limiting ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’” *Id.* at 1328 (citations omitted); *Shoes by Firebug LLC v. Stride Rite Children's Grp., LLC*, 962 F.3d 1362, 1367 (Fed. Cir. 2020) (citations omitted). Conversely, a preamble only “limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.” *Id.* at 1367 (citations omitted).

Here, Mr. Wilson’s analysis of the Claim 1’s Preamble is correct. The Court need not look to any intrinsic or extrinsic evidence because the Preamble clearly does not supply language necessary to make the body of the claim a “structurally complete invention.” Patent ‘386’s claim body clearly defines “a structurally complete invention.” This Preamble merely states the purpose and/or intended use of the invention. Despite SMG’s contention, this Preamble is not “grammatically essential” to the understanding of one or more elements in the body of the claim. Therefore, the Court finds that the Preamble is not limiting, and the terms, contained therein, do not require construction.

B. Claim 1 Disputed Language

1. “Substantially orthogonally”

Claim Language (Claim 1(a)(ii))	Plaintiff's Proposed Construction	SMG's Proposed Construction
“a first arm extending substantially orthogonally from a first distal end of the transverse component”	<i>Plain and ordinary meaning – no construction necessary.</i>	At essentially a 90-degree angle to the face of the transverse component

Mr. Wilson maintains that the term “substantially orthogonally” should be construed to have its plain and ordinary meaning because SMG’s construction inserts redundancy and confusion into the claim, has no intrinsic support, and contradicts the accepted understanding of “substantially.” Therefore, Mr. Wilson asserts that SMG’s proposed construction should be rejected.

SMG contends that both “substantially” and “essentially” allow “for some divergence from an exact 90-degree… angle.” SMG further argues that its proposed construction clarifies that the substantially 90-degree angle is measured between the arm and the transverse component, not between the arm and, e.g., the ground or some other part of the patented device.

The term “substantially” is commonly used by claim drafters to indicate approximation.” *Dana Corp. v. Am. Axle & Mfg., Inc.*, 110 Fed.Appx. 871, 876 (Fed. Cir. 2004). Courts construing “substantially orthogonally” have held that qualifying the word “orthogonal” with “substantially” “permit[s] deviations from a strictly perpendicular … orientation.” *Oakwood Energy Mgmt., Inc. v. Le*, No. 02-74730, 2003 WL 25784783, at *4 (E.D. Mich. Nov. 6, 2003); *see also 3M Co. v. Avery Dennison Corp.*, Civil No. 10-2630, 2012 WL 1004865, at *5-6 (D. Minn. Mar. 22, 2012) (construing “substantially orthogonally” as meaning “approximately 90 degrees”). Whereas, “essentially” is narrower than “substantially.” Merriam-Webster defines “essentially” as a word “used to identify or stress the basic or essential character or nature of a … thing or to say that a description is basically true or accurate.” (ECF No. 132 at p. 42).

Here, under the well-settled case law in *Phillips, supra*, this Court need only look to the ordinary meaning of the claim term of “substantially orthogonally.” SMG’s argument, that the term “orthogonally” would be too confusing for a jury, conflates the standard by which the Court needs to construe claim terms. The standard for construction requires determination of how the term would be understood by a “person of ordinary skill in the art” (POSITA). At argument, SMG conceded that orthogonally means “at a right angle.” Therefore, the term, “orthogonally,” does not present a term of legitimate disagreement. SMG has not presented any compelling evidence that a conflict exists as to how a POSITA would understand “orthogonally” as presented in Claim 1. Further, the Court agrees with Mr. Wilson that “essentially” and “substantially” cannot be read synonymously, where the guiding case law and dictionary definitions confirm that “substantially” permits deviations from 90-degrees, while “essentially” suggests a stricter adherence to the 90-degree angle. Therefore, the Court finds that it need not construe “substantially orthogonally.” It shall be given its plain and ordinary meaning.

2. “Transverse component”

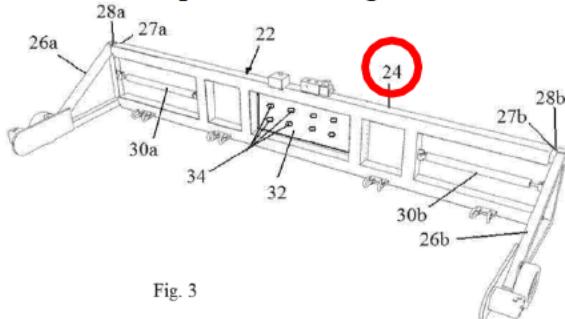
Claim Language (Claim 1(a)(i))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
“a vertically oriented transverse component ”	<i>Plain and ordinary meaning – no construction necessary.</i>	A rigid, substantially flat piece extending at right angles to other components

Mr. Wilson contends that the term “transverse component” appears within this Claim as a feature of the frame from which the first and second arms extend and to which the mounting plate attaches, and the hydraulic rams connect. (ECF No. 131-2 at 10, 3:30-4:23). Mr. Wilson maintains that this term and this Claim are sufficiently clear, such that the plain and ordinary meaning is “readily apparent,” requiring no additional construction. Mr. Wilson further asserts that SMG’s proposed restrictions are not present within the specification. Instead, Mr. Wilson

contends that the specification of Patent '386 and the prosecution history supports a "plain and ordinary meaning."

SMG's contention, that a "transverse component" must be "rigid" and "substantially flat," is based upon the language and figures contained in the "Detailed Description of the Preferred Embodiment(s)," which states, in relevant part, as follows:

A first embodiment of the of the present invention is depicted in FIGS. 1 and 4 generally at 20. Turf removal attachment 20 includes a frame featuring a longitudinal spine 24 and two laterally extending arms 26a and 26b. Arms 26a and 26b are connected to spine 24 by means of slidable mounts 28a, 28b (FIG. 4) which telescope into the longitudinal ends 27a, 27b of spine 24, respectively.



(ECF No. 57-1 at pp. 5, 8) (emphasis in original).

SMG's attempt to impart limitations on "transverse component," based upon the specifications and the preferred embodiment, is unavailing. Such limitations are not supported by the intrinsic record, case law, and testimony of SMG's own expert. Nothing in the intrinsic evidence suggests that "transverse component" is unclear or ambiguous. The only evidence that points to any rigidity and flatness is the preferred embodiment, which, under the prevailing case law, cannot be limiting. Further, SMG's own expert has admitted that "frame," the claim component of which "transverse component" is a part, and "spine," an example from the specification, do not always denote rigidity, flatness, or right angles. (ECF No. 143-1 at p. 21-24). Therefore, the Court finds that it need not construe "transverse component." It shall be given its plain and ordinary meaning.

3. “Transverse element”

Claim Language (Claim 9)	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
“The synthetic turf removal attachment of claim 1, wherein the hydraulic system is mounted on the transverse element .”	<p><i>Plain and ordinary meaning – no construction necessary.</i></p> <p><i>Alternatively, transverse component.</i></p>	An element situated perpendicularly

Mr. Wilson argues that the term “transverse element” should be construed to have its plain and ordinary meaning for the same reasons “transverse component” should be construed to have its plain and ordinary meaning. Mr. Wilson contends that “transverse element” in Claim 9 is a dependent claim and refers to the “transverse component” recited in Claim 1. Accordingly, Mr. Wilson maintains that the parties’ differences with respect to “transverse element” are minimal.

SMG, in contrast, proposes that “transverse element” should be construed as “an element situated perpendicularly,” and argues that the parties’ primary proposed constructions are essentially the same. In response, Mr. Wilson contends that because SMG concedes “the parties’ primary proposed constructions are essentially the same,” then “transverse element” should be given its plain and ordinary meaning because it is understood by a person of skill in the art.

A “patent claim” is the ““portion of the patent document that defines the scope of the patentee’s rights.”” *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 321, 135 S.Ct. 831, 190 L.Ed.2d 719 (2015) (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996)). There are two general types of patent claims: (1) independent claims, and (2) dependent claims. An “independent claim” is a stand-alone claim that contains all the limitations necessary to define an invention. *Bee Warehouse, LLC v. Blazer*,

---F.Supp.3d---, 2023 WL 4317661, at fn 1 (N.D. Ala. May 3, 2023). A “dependent claim” refers to a previous claim and must add another limitation to the previous claim. *Id.* A dependent claim incorporates by reference all the limitations of the claim to which it refers. *Id.* “[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005).

Here, consistent with the analysis for “transverse component,” nothing in the intrinsic evidence suggests that “transverse element” term is unclear or ambiguous. Further, “transverse element” only appears in dependent Claim 9. The only “transverse” term referred to in Claim 1, upon which Claim 9 depends, is the term “transverse component.” (ECF No. 131-2 at p. 10, 4:47-49). When read in context, a person of ordinary skill in the art would read Claim 9’s “transverse element” as referring to the “transverse component” in Claim 1. Accordingly, “transverse element” need not be construed. It shall be given the same plain and ordinary meaning for the same reasons as “transverse component,” discussed above.

4. “Removable turf removal tool”

Claim Language (Claims 1(b)-(c))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
“a [first/second] removable turf removal tool connected to a distal end of the [first/second] arm” (Claim 1(b)-(c))	<i>Plain and ordinary meaning – no construction necessary.</i>	A detachable blade and roller tine for removing turf.

Mr. Wilson contends that “removable turf removal tool” should have its plain and ordinary meaning. He argues that no construction is necessary because “removable turf removal tool” consists of commonly understood words that are not highly technical or vague and that render the claim terms clear on their face.

SMG maintains that Mr. Wilson's patent claims no tools or classes of tools other than those used for "turf cutting" and "turf rolling" and that only hydraulically powered tools are claimed, which would eliminate other types of turf-removal tools such as rakes, shovels and the like. SMG further argues that Patent '386 only mentions "blades" and "rollers" as attached tools for turf removal. In support of this proposition, SMG maintains that its proposed construction incorporates the following independent and dependent claims:

- Independent Claims 1(b) and 1(c) describe "a first" and "a second removable turf removal tool," each of which is "connected to a distal end" of its respective "arm" of the machine.
- Independent Claims 1(d) and 1(e) claim "a first" and "a second hydraulic motor operably coupled to the" first and second turf removal tools.
 - Dependent Claim 3 claims the "synthetic turf removal attachment of claim 1, wherein the first and second removable turf removal tools are turf cutting tools."
 - Dependent Claim 4 claims the "synthetic turf removal attachment of Claim 3, wherein" the two tools "each comprise" three elements: "(a) a turf cutting blade; (b) a cutter shoe; and (c) a retractable blade guard" which "covers the turf cutting blade when not in use."
 - Dependent Claim 11 claims the "synthetic turf removal attachment of Claim 1, wherein the first and second removable turf removal tools are turf rolling tools."
 - Dependent Claim 12 claims the "synthetic turf removal attachment of Claim 11, wherein each turf rolling tool comprises a pair of rolling tines."

In response, Mr. Wilson refutes SMG's attempt to require the cutter blade and roller tine as limitations based upon the dependent claims. Mr. Wilson contends that said tools are part of the specification and the preferred embodiment, which cannot limit his claim. Further, Mr. Wilson argues that SMG misreads and misapplies the doctrine of claim differentiation.

Patents typically contain both independent and dependent claims. *Raffel Sys., LLC v. Man*

Wah Holdings Ltd., Inc., 570 F.Supp.3d 613, 624 (E.D. Wis. 2021). An independent claim stands on its own and does not refer to any other claim; therefore, it is read separately when determining its scope. *Id.* A dependent claim references at least one other claim and incorporates the elements of the claims to which it refers. *Id.*

Under the doctrine of claim differentiation, “the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315. This presumption is “especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed.Cir. 2003). “[T]he fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives.” *Phillips*, 415 F.3d at 1327.

Here, SMG acknowledges that a patent specification within a preferred embodiment, without more, does not justify reading a claim limitation in said embodiment. (ECF No. 137 at p. 22). But as an end run to its acknowledgement, SMG requests that this Court limit Independent Claim 1 with the cutter blade and roller tine limitations contained within the dependent claims. SMG’s request runs afoul of the doctrine of claim differentiation in that it is clearly asking the Court to apply the limitations of Dependent Claims 3, 4, 11, and 12 into Independent Claim 1. Therefore, SMG’s arguments, under the doctrine of claim differentiation, are unavailing. The Court finds that it need not construe “removable turf removal tool.” It shall be given its plain and ordinary meaning.

5. “Quick coupler”

Claim Language (Claim 1(f)(i)-(ii))	Plaintiff's Proposed Construction	SMG's Proposed Construction
<p>“a [first/second] hydraulic quick coupler capable of being operably connected to an output port of an external source of hydraulic fluid and operably connected to a valve assembly”</p>	<p><i>Plain and ordinary meaning – no construction necessary.</i></p>	<p>A hose fitting that permits rapid attachment/detachment without threaded or bolted fittings, by fitting a female coupling half into a male coupling half of the same size to form a seal.</p>

Mr. Wilson maintains that “quick coupler” should have its plain and ordinary meaning. Specifically, Mr. Wilson contends that the specification of Patent ‘386 does not define or limit the term “quick coupler” or use it in any way other than in accord with its plain and ordinary meaning. According to Mr. Wilson, the specification simply states that “quick couplers” are “provided to attach the supply system to a remote hydraulic source on the skid steer” or “connect to the output and return lines from the hydraulic pump on the skid steer.” Mr. Wilson contends that said statements do not limit or disavow the full scope of the plain and ordinary meaning of “quick coupler.”

SMG argues that, given that the patent claims “quick couplers” through which hydraulic fluid runs when the invention is used, this claim must be limited to quick couplers that form a seal; otherwise, the hydraulic fluid would leak, potentially to the point that the device would become inoperable. SMG asserts that it does not contest that quick couplers with threads exist. However, as explained by SMG’s expert, in the context of the Patent, the POSITA would not

understand which type of quick coupler to be used, because quick couplers with screw threads have a greater tendency to leak and they do not contain any mechanism to prevent sudden and potentially large leaks each time the turf removal attachment is disconnected from the skid steer. Further, SMG argues that the POSITA would understand “quick coupler” to refer to male and female connectors, also known as plug and socket connectors, due to their lower tendency to leak and the fact that upon disconnection, they close the ends of the hydraulic hose, preventing the spillage of hydraulic fluid from the lines.

Mr. Wilson responds that, despite SMG’s expert, Dr. Malguarnera, admitting “quick couplers” with threads exist, SMG argues that the term should be limited to male and female connectors, and exclude couplers with threads. (ECF No. 143-1 at p. 18). Mr. Wilson also maintains that Dr. Malguarnera offered his opinion based upon his thoughts on whether couplers with threads would be sealed or would leak, despite the fact that the concept of sealing is not discussed in the claims, and the words “fluid tight”, “seal”, “leak” and “leakage” appear nowhere in the intrinsic record. *Id.* at p. 72.

Here, the Court finds that, based upon a review of the claim language and the absence of words such as “fluid tight”, “seal”, “leak” and “leakage” as well as the admissions of Dr. Malguarnera, there exists no reason to construe “quick coupler” to exclude couplers with threads. The record does not support that a POSITA would not understand that “quick coupler” could include a variety of coupler types with varying types, including threaded or bolted types, that could include mechanisms to prevent fluid leakage. Accordingly, the Court finds that it need not construe “quick coupler.” It shall be given its plain and ordinary meaning.

6. “Operably connected”

Claim Language (Claim 1(f)(i) & (ii))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
<p>“a [first/second] hydraulic quick coupler capable of being operably connected to an output port of an external source of hydraulic fluid and operably connected to a valve assembly”</p>	<p><i>Plaintiff objects to this term as being disclosed as disputed out of time and, thus, should not be subject to construction in this proceeding.</i></p> <p><i>To the extent this phrase is determined to be subject to these claim construction proceedings, Plaintiff’s position is plain and ordinary meaning – no construction necessary.</i></p>	<p>Connected so as to form a seal such that the hydraulic system of the skid steer can operate the synthetic turf removal attachment.</p>

Mr. Wilson’s contends that “operably connected” consists of commonly used and understood words that renders the claim term clear on its face and not highly technical or vague. He further maintains that the Patent ‘386 specification does not mention, define, or disavow the full scope of the ordinary meaning of this general descriptive claim term.

SMG argues that, as it asserted above, the “quick couplers” of the Patent ‘386 cannot be “operably connected to an output port of an external source of hydraulic fluid and... to a valve assembly,” or in the case of the “second hydraulic quick coupler” of Claim 1(f)(ii) “to a return port of the external source of hydraulic fluid,” unless they form seals with said output port, valve assembly, and return port. SMG argues that Mr. Wilson identifies no evidence, intrinsic or extrinsic, suggesting that the “quick couplers” of the Patent ‘386 could be “operably connected” to a skid steer’s hydraulic system without forming seals at each point of connection.

In response, Mr. Wilson maintains that SMG cannot dispute “operably connected” is a commonly used claim term routinely construed by courts in many contexts to have its plain and ordinary meaning. Instead, he argues that SMG relies on the opinion of its expert witness to require the presence of seals.

The Federal Circuit has stated that the term “operably connected” “is a general descriptive term frequently used in patent drafting to reflect a functional relationship between claimed components.” *Innova/Pure Water*, 381 F.3d at 1118; see also *Advanced Respiratory, Inc. v. Electromed, Inc.*, No. CIV. 00-2646(DWF/SRN), 2003 WL 118246, at *8 (D. Minn. Jan. 10, 2003) (“the common meaning of the term ‘operably connected’ is that one component is connected to another component in such a manner that the components may interact with each other.”); see also, *Hunter Douglas Inc. v. Great Lake Woods, Inc.*, 2017 WL 11673680, at *4 (D. Colo. Nov. 3, 2017) (“the term ‘operatively connected’ has a plain and ordinary meaning and needs no further construction”).

Here, as noted by the relevant case law, “operably connected” is generally understood and requires no construction. Further, as with “quick coupler,” and which SMG’s expert acknowledges, the Patent ‘386 specification and claims do not mention the words and concepts “fluid tight”, “seal”, “leak” and “leakage.” A sealing requirement is irrelevant to the “written record of the patent.” *Phillips*, 415 F.3d at 1318. Moreover, without a clear disavowal or limitation, adding “sealing” language would improperly add new language that is not part of the intrinsic record. *See Innova/Pure Water*, 381 F.3d at 1118-20.

Accordingly, the Court finds that it need not construe “operably connected.” It shall be given its plain and ordinary meaning.

7. “Mounting plate”

Claim Language (Claim 1(g))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
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<p>“a mounting plate attached to a rear face of the transverse component having a plurality of holes capable of accepting a plurality of attachment bolts, permitting attachment of the synthetic turf removal attachment to the skid steer.”</p>	<p><i>Plain and ordinary meaning – no construction necessary.</i> Alternatively, a plate that can be mounted to another item.</p>	<p>A flat component used to connect two or more elements. .</p>
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Mr. Wilson argues that “mounting plate” should be given its plain and ordinary meaning because nowhere in the intrinsic record does the patentee ever qualify the claimed “mounting plate” as “flat.” Further, Mr. Wilson maintains that the prosecution history, namely his Patent Application, which the ‘386 Patent incorporates by reference (ECF No. 131-2 at p. 9), supports a universal, rather than a flat, attachment plate.

SMG contends that “mounting plate” denotes a “flat component.” In support, SMG relies on three dictionary definitions wherein each defines “plate” as “flat.” SMG also counters that the intrinsic evidence supports its position because the specification depicts the “mounting plate” as flat in the only drawing in which it appears. In addition, SMG maintains that the intrinsic record contains no evidence that the claimed “mounting plate” can be of a shape that is not flat. SMG also argues that, while Mr. Wilson asserts that his Patent Application references a universal attachment plate, the drawing in said Patent Application is also flat and essentially identical to the “mounting plate” in the specification of the Patent ‘386.

Mr. Wilson responds that SMG’s argument is based upon drawings and extrinsic evidence. Further, Mr. Wilson contends that, while SMG argues that the “universal attachment plate” shown in the provisional application is “flat” according to the drawings, SMG fails to address the specific language used in the provisional application of a “universal attachment plate,” which does not require flatness. Further, Mr. Wilson contends that SMG’s expert acknowledged that universal mounting/attachment plates need not be flat.

Here, the Court does not find any ambiguity in the words “mounting plate” requiring the examination of any extrinsic evidence, including SMG’s referenced definitions. Further, SMG’s other arguments, relying on embodiment drawings and specifications, are unavailing because prevailing case law holds that the same cannot limit a claim without a clear intention by Mr. Wilson to limit his claim to a “flat” mounting plate. In addition, the prosecution history indicates a universal mounting plate, but it does not require flatness. Finally, SMG’s expert conceded that “plate” does not have to be flat.

Accordingly, the Court finds that it need not construe “mounting plate.” It shall be given its plain and ordinary meaning.

8. “[Plurality of] attachment bolts”

Claim Language (Claim 1(g))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
“a mounting plate attached to a rear face of the transverse component having a plurality of holes capable of accepting a plurality of attachment bolts , permitting attachment of the synthetic turf removal attachment to the skid steer.”	<p><i>Plain and ordinary meaning – no construction necessary.</i></p> <p>Alternatively, two or more attachment bolts.</p>	[Two or more] threaded bolts used to attach the synthetic turf removal attachment to the skid steer.

Mr. Wilson contends this phrase requires no construction because it is not highly technical in nature, is easily understandable, and is not vague. Mr. Wilson further argues that the plurality of holes need only have the ability to receive the bolts, and the form or configuration of the bolts, whether threaded, unthreaded or otherwise, does not matter so long as the claimed holes are “capable of accepting” the attachment bolts. Further, Mr. Wilson maintains that the claim does not even require the presence of bolts. He argues that, in the prosecution history, the Examiner considered the language as an intended use, which would not constitute a limitation.

SMG argues that extrinsic evidence sets forth that a “bolt’s” plain and ordinary meaning is a rod-shaped fastener with threads. SMG further argues that Mr. Wilson did not provide a broader or more idiosyncratic meaning for “attachment bolts” in the claims or specifications. SMG specifically maintains that, in the specification, Mr. Wilson describes them as “conventional attachment bolts.” Finally, SMG argues that its construction is the only logical conclusion given the Figure 3 drawing of the preferred embodiment

In response, Mr. Wilson argues that the “capable of” claim language in the phrase “a plurality of holes capable of accepting a plurality of attachment bolts” means that a feature has the ability to do something. Therefore, he contends that “bolts” is not a limitation because the plurality of holes merely needs to be “capable of accepting” the bolt, which was confirmed by the Examiner during prosecution. Further, Mr. Wilson asserts that SMG’s expert confirmed that the recited “plurality of bolts” need not be present, only that the mounting plate has round holes of a right size for bolts to go through them. (ECF No. 143-1 at p. 28). Therefore, Mr. Wilson concludes that the particular form of the bolts and their presence is inconsequential, and the phrase “plurality of bolts” should not be construed.

Here, like above, SMG asks this Court to construe Mr. Wilson’s claim based upon drawings, specifications, and embodiments. However, as already discussed above, those do not, without a clear intent by the patentee, limit a claim. *See, supra Hill-Rom Servs., Inc.* 755 F.3d at 1372; *Acumed LLC v. Stryker Corp.*, 483 F.3d at 809; *Hockerson-Halberstadt, Inc.*, 222 F.3d at 955. None of the claim’s drawings, specifications, or embodiments communicate any intent that would limit Mr. Wilson’s claim. Further, SMG’s position is contradicted by the prosecution history, wherein the Examiner denied any limitation with regard to “attachment bolts.” *See Phillips v.*, 415 F.3d at 1317 (“the prosecution history can often inform the meaning of the claim

language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.”). Finally, again SMG’s position is belied by its expert’s testimony regarding any needed specificity for the term “attachment bolts.”

Accordingly, the Court finds that it need not construe “plurality of attachment bolts.” It shall be given its plain and ordinary meaning.

9. “Permitting attachment”

Claim Language (Claim 1(g))	Plaintiff’s Proposed Construction	SMG’s Proposed Construction
“a mounting plate attached to a rear face of the transverse component having a plurality of holes capable of accepting a plurality of attachment bolts, permitting attachment of the synthetic turf removal attachment to the skid steer.”	<p><i>Plain and ordinary meaning – no construction necessary.</i></p> <p>Alternatively, capable of attachment.</p>	With which threaded bolts the synthetic turf removal attachment is attached to the skid steer

Mr. Wilson argues that “permitting attachment” should be given its plain and ordinary meaning based upon easily understandable language and the intrinsic record. He further contends that SMG’s proposed construction attempts to read a preferred embodiment, which does not include threaded bolts.

SMG disagrees with Mr. Wilson’s contention that the ‘386 Patent covers essentially any means of attaching the claimed device to a skid steer, so long as the claimed “mounting plate” is included in the configuration. SMG argues that Claim 1(g) limits such a broad reading namely: Claim 1(g) recites a mounting plate that has holes in it through which “attachment bolts” can pass, “permitting attachment” of the device “to the skid steer.” SMG maintains that nothing in this language recites or implies any other means of attachment.

In response, Mr. Wilson argues that SMG is reading the features of the non-limiting embodiment of figure 3 and column 2 into the claims. Mr. Wilson asserts that the claims do not require actual bolting to a skid steer. Indeed, Mr. Wilson maintains that “permitting attachment” is a statement of capability and does not require the presence of either bolts or a skid steer.

“Permitting” merely means allowing or having the capability of. *See SRAM Corp. v. Fox Factory, Inc.*, No. 04 C 2162, 2005 WL 6266955, at *2 (N.D. Ill. Nov. 18, 2005) (“The parties again agree . . . that ‘permitting’ means ‘allowing.’”); *Barrette Outdoor Living, Inc. v. Origin Point Brands, LLC*, No. 1:13-CV-1665-AT, 2014 WL 11930616, at *3 (N.D. Ga. June 17, 2014) (agreeing with the parties agreed construction that “permits a sliding motion therebetween” means “allows a smooth movement between the pieces.”).

Here, the plain and ordinary meaning of “permitting attachment” is supported by the context of the term language as well as the intrinsic evidence. During prosecution of the ’386 Patent, the Examiner interpreted “permitting attachment” as “capable of.” (ECF No. 131-2 at pp. 59, 62, 98-99, 102). Courts have well established that “capable of” is not a positive claim limitation requiring construction and, at most, has the ability to do something or permit something to happen. *See Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335 (Fed. Cir. 2012); *Sta-Rite Indus., LLC v. ITT Corp.*, 682 F.Supp.2d 738, 757 (E.D. Tex. 2010); *Boston Scientific Corp. v. Cordis Corp.*, No. C 02-01474 JW, 2006 WL 3782840, at *2 (N.D. Cal. Dec. 20, 2006). The Court also agrees that SMG again attempts to construe “permitting attachment” based upon the preferred embodiment, which does not describe threaded bolts. *Innova/Pure Water*, 381 F.3d at 1117.

Accordingly, the Court finds that it need not construe “permitting attachment.” It shall be given its plain and ordinary meaning.

IV. Conclusion

Following consideration of the foregoing, the Court concludes that it does not need to construe any of the disputed terms in Patent '386 beyond their plain and ordinary meaning. The parties are directed to confer to consider whether any mediation efforts would be fruitful given this Court's Claim Construction Order. On or before October 31, 2023, the parties shall file a joint status report regarding the same. The timeline from this Court's December 1, 2022 Order (ECF No. 128) is amended as follows:

Date	Event
21 days after filing of Joint Status Report	Amended Infringement Contentions pursuant to [LPR 3.8(a)]
35 days after filing of Joint Status Report	Amended Non-infringement and Invalidity Contentions pursuant to [LPR 3.8(a)]
30 days after filing of Joint Status Report	Initial Expert Reports by party bearing the burden of proof pursuant to [LPR 5.1]
30 days after Initial Expert Reports	Responsive Expert Reports pursuant to [LPR 5.1]
14 days after Responsive Expert Reports	Rebuttal Expert Reports in response to Responsive Expert Reports pursuant to [LPR 5.1]
30 days after Rebuttal Expert Reports	Expert Deposition Deadline
30 days after Expert Deposition Deadline	Dispositive Motion and Daubert Deadline

DATED: October 17, 2023

BY THE COURT:



MARILYN J. HORAN
UNITED STATES DISTRICT JUDGE